

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**FOIL when  $A \neq 1$  SLTN (version 128)**

**FOIL the expressions shown below:**

1.  $(-8x - 6)(-9x - 8)$

$$\begin{aligned} &(-8)(-9)x^2 + (-8)(-8)x + (-6)(-9)x + (-6)(-8) \\ &(72)x^2 + (64)x + (54)x + (48) \\ &72x^2 + 118x + 48 \end{aligned}$$

2.  $(7x + 4)(-2x - 7)$

$$\begin{aligned} &(7)(-2)x^2 + (7)(-7)x + (4)(-2)x + (4)(-7) \\ &(-14)x^2 + (-49)x + (-8)x + (-28) \\ &-14x^2 - 57x - 28 \end{aligned}$$

3.  $(3x + 8)(-6x + 3)$

$$\begin{aligned} &(3)(-6)x^2 + (3)(3)x + (8)(-6)x + (8)(3) \\ &(-18)x^2 + (9)x + (-48)x + (24) \\ &-18x^2 - 39x + 24 \end{aligned}$$

4.  $(-4x - 2)(-3x - 6)$

$$\begin{aligned} &(-4)(-3)x^2 + (-4)(-6)x + (-2)(-3)x + (-2)(-6) \\ &(12)x^2 + (24)x + (6)x + (12) \\ &12x^2 + 30x + 12 \end{aligned}$$

5.  $(-8x - 7)(7x + 9)$

$$\begin{aligned} &(-8)(7)x^2 + (-8)(9)x + (-7)(7)x + (-7)(9) \\ &(-56)x^2 + (-72)x + (-49)x + (-63) \\ &-56x^2 - 121x - 63 \end{aligned}$$

**FOIL the expressions shown below:**

6.  $(8x - 7)(-3x + 5)$

$$\begin{aligned} & (8)(-3)x^2 + (8)(5)x + (-7)(-3)x + (-7)(5) \\ & \quad (-24)x^2 + (40)x + (21)x + (-35) \\ & \quad -24x^2 + 61x - 35 \end{aligned}$$

7.  $(9x - 8)(-9x + 7)$

$$\begin{aligned} & (9)(-9)x^2 + (9)(7)x + (-8)(-9)x + (-8)(7) \\ & \quad (-81)x^2 + (63)x + (72)x + (-56) \\ & \quad -81x^2 + 135x - 56 \end{aligned}$$

8.  $(3x - 3)(9x + 8)$

$$\begin{aligned} & (3)(9)x^2 + (3)(8)x + (-3)(9)x + (-3)(8) \\ & \quad (27)x^2 + (24)x + (-27)x + (-24) \\ & \quad 27x^2 - 3x - 24 \end{aligned}$$

9.  $(-2x + 5)(3x - 7)$

$$\begin{aligned} & (-2)(3)x^2 + (-2)(-7)x + (5)(3)x + (5)(-7) \\ & \quad (-6)x^2 + (14)x + (15)x + (-35) \\ & \quad -6x^2 + 29x - 35 \end{aligned}$$

10.  $(-9x - 9)(9x + 4)$

$$\begin{aligned} & (-9)(9)x^2 + (-9)(4)x + (-9)(9)x + (-9)(4) \\ & \quad (-81)x^2 + (-36)x + (-81)x + (-36) \\ & \quad -81x^2 - 117x - 36 \end{aligned}$$